

METAL-CERAMIC CIRCUIT BOARD AND
MANUFACTURING METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

A metal-ceramic circuit board is characterized by being
5 constituted by bonding on a base plate of aluminum or aluminum
alloy at least one of ceramic substrate boards having a conductive
metal member for an electronic circuit. A method of manufacturing
a metal-ceramic circuit board is characterized by comprising the
steps of melting aluminum or aluminum alloy in a vacuum or inert
10 gas atmosphere to form a molten metal, contacting one surface of a
ceramic substrate board directly with the molten metal in a vacuum
or inert gas atmosphere, cooling the molten metal and the ceramic
substrate board to form a base plate of aluminum or aluminum alloy,
which is bonded directly on the ceramic substrate board without
15 forming any oxidizing film therebetween and bonding a conductive
metal member for an electronic circuit on the ceramic substrate
board by using a brazing material. The base plate has a proof stress
not higher than 320 (MPa) and a thickness not smaller than 1mm.